

$$\begin{array}{l}
 x + y = 8000 \quad \textcircled{1} \quad x = \$ \text{ invested} \\
 y = 8000 - x \quad \text{in stocks} \\
 0.10x + 0.04y = 500 \quad \textcircled{2} \quad y = \$ \text{ invested} \\
 \quad \quad \quad \text{in bonds} \\
 0.10x + 0.04(8000 - x) = 500 \\
 0.10x + 320 - 0.04x = 500 \\
 0.06x = 180 \\
 \frac{0.06x}{0.06} = \frac{180}{0.06} \\
 x = 3000 \\
 x + y = 8000 \\
 x = 3000 \\
 3000 + y = 8000 \\
 y = 5000
 \end{array}$$

If you invest \$3000 in stocks and \$5000 in bonds you will earn an annual interest of \$500.

Feb 20-1:57 PM